



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/214,519	01/07/1999	TOSHIAKI HASHIZUME	101850	8609

7590 11/29/2001

OLIFF & BERRIDGE  
PO BOX 19928  
ALEXANDRIA, VA 22320

EXAMINER

LEROUX, ETIENNE PIERRE

ART UNIT PAPER NUMBER

2858

DATE MAILED: 11/29/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/214,519

Applicant(s)

Hashizume et al

Examiner

Etienne LeRoux

Art Unit

2858



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Nov 9, 2001
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirements.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 18) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

Art Unit: 2858

***Further identification of Prior Art***

This office action is in response to request by applicant of 4/26/01, Paper No. 19 to further identify the cited prior art. Examiner has included US Patent Numbers for applicant's easy reference.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 4, 6 - 9 (amended) are rejected under 35 U.S.C.102(b) as being anticipated by USPAT 5,508,834 to Yamada et al.

Regarding claims 1 and 4 (amended), Yamada et al. disclose .....an optical modulation element [Fig 5, #5] ..... a transparent plate [Fig 5, #3] secured to the optical modulator ..... a projection unit [Fig.2, #209].

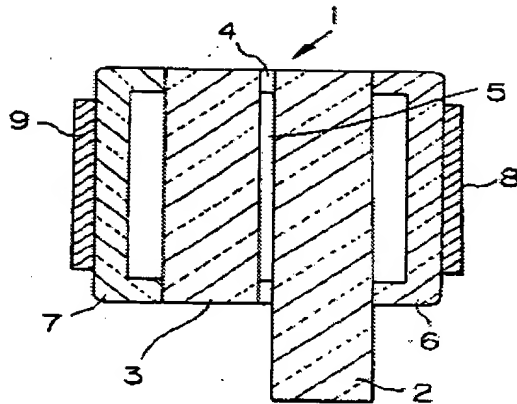
Regarding claims 2 and 9 (amended), Yamada et al. disclose .....a polarizer [Fig 5, #9] bonded to the transparent plate.

Regarding claim 6 (amended), Yamada et al. disclose the transparent plate [Fig 5, #3] thickness is larger than the focal length of the projection lens [Fig 2, #209].

Regarding claim 7 (amended), Yamada et al disclose the transparent plate is made of resin [Col 6, line 60].

Art Unit: 2858

*FIG. 5*



Regarding claim 8 (amended), as best the examiner is able to ascertain, Yamada et al disclose a polarizer [Fig 5, #9] and a pair of substrates [Fig 5, #2 and #3]

Claims 14 - 16 (amended) are rejected under 35 U.S.C. 102(b) as being anticipated by USPAT 6,007,205 to Fujimori.

Regarding claim 14 (amended), Fujimori discloses: a plurality of optical modulation devices [Fig 12, 925R, 925G, 925B], a prism that synthesizes the light flux [Fig 11, 910], a projection unit [Fig 9, 6], a partition [Fig 12, 1500] that surrounds said plurality of optical modulation devices and said prism, the partition having a transparent plate fitted in an incident window corresponding to a light incident surface [Fig 12] a light outgoing window that emits the light flux modulated by at least one optical modulation device [Fig 12], a fan [Fig 12], a polarizer [Fig 12].

Art Unit: 2858

*Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 5 (amended) is rejected under 35 U.S.C. 103(a) as being unpatentable over USPAT 5,508,834 to Yamada et al. in view of USPAT 5,865,521 to Hashizume et al.

Regarding claim 5 (amended), the difference between Yamada et al. and the claimed invention is the antireflection film on the surface of the transparent plate. Hashizume et al. disclose an antireflection film [Fig 12,632]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yamada et al. to include the antireflection film as disclosed by Hashizume et al. The ordinary artisan would have been motivated to modify Yamada et al. as above for the purpose of eliminating reflections from the transparent plate.

4. Claims 3 and 10 (amended) are rejected under 35 U.S.C. 103(a) as being unpatentable over USPAT 5,508,834 to Yamada et al. in view of USPAT 5,212,573 to Yamazaki et al.

Regarding claims 3 and 10 (amended), the difference between Yamada et al. and the claimed invention is the transparent plate being treated for electrostatic protection. Yamazaki discloses a transparent substrate being electrostatically protected [Col 3, lines 1-35]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify

Art Unit: 2858

Yamada et al to include the electrostatic protection as disclosed by Yamazaki et al. The ordinary artisan would have been motivated to modify Yamada et al as above for the purpose of protecting the optical modulator against excessive electrostatic voltage.

5. Claims 11 - 13 (amended) are rejected under 35 U.S.C. 103(a) as being unpatentable over USPAT 5,508,834 to Yamada et al. in view of USPAT 5,868,485 to Fujimori et al.

Regarding claims 11 - 13 (amended), the difference between Yamada et al. and the claimed invention is the mounting member, the color synthesizing prism, a fixed frame plate in contact with the color synthesizing prism and an intermediate frame plate. Fujimori et al. disclose ....a mounting member [Fig 5] ....a color synthesizing prism [Fig 5, #22] .....a fixed frame plate [Fig 5, #54] in contact with the color synthesizing prism [Fig 5, #22] ....an intermediate frame plate [Fig 5, #55]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yamada et al to include the above components as taught by Fujimori et al. The ordinary artisan would have been motivated to modify Yamada et al. as above for the purpose of securing the transparent plate and the polarizer to the color synthesizing prism.

Regarding claim 12 (amended), Fujimori et al. disclose the mounting frame plate being made of resin [Col 10, line 15].

Regarding claim 13 (amended), Fujimori et al. disclose a metal mounting frame [Col 10, line 43].

Claim 17 (amended) is rejected under 35 U.S.C. 103(a) as being unpatentable over USPAT 6,007,205 to Fujimori in view of USPAT 5,212,573 to Yamazaki et al.

Art Unit: 2858

Regarding claim 17 (amended), the difference between Williams et al. and the claimed invention is the transparent plate being treated for electrostatic protection. Yamazaki discloses a transparent substrate being electrostatically protected [Col 3, lines 1-35]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Williams et al. to include the electrostatic protection as disclosed by Yamazaki et al. The ordinary artisan would have been motivated to modify Williams et al. as above for the purpose of protecting the optical modulator against excessive electrostatic voltage.

Claims 18 and 19 (new) are rejected under 35 U.S.C. 103(a) as being unpatentable over USPAT 5,508,834 to Yamada et al. and further in view of USPAT 5,260,730 to Williams.

The examiner may take official notice of facts outside of the record which are capable of instant and unquestionable demonstration as being "well-known" in the art. Yamada et al and further in view of Williams disclose the claimed invention except for a power supply unit, an interface unit, a control circuit that controls the optical modulation element, an outer casing that accommodates the light source, the optical modulation element, the partition, the power supply unit, the interface unit, and the control circuit. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the above components since it was known in the art that the above components are required for a conventional optical modulation element and projection display device. *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970).

Art Unit: 2858

Applicant may consider overcoming the above assertion of obviousness by demonstrating that provision of the above components achieves unexpected results relative to the prior art.

*In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

Furthermore, if Applicant has obtained unexpected results relative to the prior art, Applicant is required to show "that the difference in results is in fact unexpected and unobvious and of both statistical and practical significance." *Ex parte Gelles*, 22 USPQ2d 1318, 1319 (Bd. Pat App. & Inter, 1992)

### ***Response to Arguments***

6. Applicant's arguments filed 11/9/01 have been fully considered but they are not persuasive.

Applicant states on page 2, "Yamada does not disclose or suggest an optical modulation device and a transparent plate formed on at least one surface of the optical modulation device as recited in amended claim 1." Examiner is not persuaded. Device is defined as "something devised or contrived<sup>1</sup>." Examiner maintains Yamada's optical modulation element [Fig 5, 5] reads on the claimed optical modulation device. Regarding rejection of the transparent plate, applicant is referred to supra office action.

Applicant states on page 3, "Other advantages of the claimed invention are described at pages 5 and 6 of the specification." Examiner is not persuaded. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., other advantages) are not recited in the rejected

---

<sup>1</sup> Merriam Webster's Collegiate Dictionary, Tenth Edition.



Art Unit: 2858

claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant states on page 3, "Fujimori does not disclose a partition that surrounds the plurality of optical modulation devices and the prism, the partition having a transparent plate fitted in a light incident window corresponding to a light incident surface of the at least one modulation device, as claimed in claim 14." Examiner is not persuaded. Applicant is referred to supra office action which clearly identifies all elements of concern. Furthermore, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant states on page 4, "Applicants submit that Yamada does not disclose or suggest a transparent plate formed on a light emitting surface of the optical modulation device, as recited in amended claim 18." Examiner is not persuaded. Regarding rejection of the transparent plate, applicant is referred to supra office action.

Applicant states on page 4, "Williams does not disclose or suggest the feature of claim 18 missing from Yamada. In fact, Williams does not disclose or suggest any transparent plate formed on a light emitting surface of an optical modulation device. Thus, even if combined,

Art Unit: 2858

Yamada and Williams does not disclose or suggest the features of claim 18.” In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. Examiner maintains that Yamada teaches a transparent plate formed on a light emitting surface of the optical modulation device per supra office action and Williams was cited for the reason of proving that claimed elements such as a power supply unit, an interface circuit, a control circuit that controls the optical modulation device and an outer casing are well-known and expected in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2858

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne (Steve) LeRoux whose telephone number is (703) 305-0620.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached at (703) 308-1436.

Any inquiry of a general nature relating to the status of this application or processing procedure should be directed to the receptionist whose telephone number is (703) 308-0956.

Etienne LeRoux

November 21, 2001

  
SAFET METJAHIC  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800